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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/720,172

11/25/2003

Ronald Ralph Cairo

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08/01/2008

GE ENERGY GENERAL ELECTRIC

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EXAMINER

OMGBA, ESSAMA

ART UNIT

PAPER NUMBER

3726

MAIL DATE

DELIVERY MODE

08/01/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/720,172	CAIRO, RONALD RALPH	
	Examiner	Art Unit	
	Essama Omgba	3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6,7,9-14 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,7,9-14 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-3, 6, 7, 9-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Farfaglia (US Patent 4,085,664).

With regards to claims 1, 6, 7, 9, 10 and 16, Applicant, at pages 1 and 2 of the specification to be known as AAPA, discloses mandrels of varying diameters to accommodate changes in diameter of components fabricated thereon. AAPA does not disclose a core mandrel with a plurality of adapter sleeves to provide mandrels of varying outside diameters. However Farfaglia teaches a core mandrel 41 with a kit of adapter mandrel sleeves 47 to provide mandrels with varying diameters, the mandrel sleeves being interchangeably engageable with the core mandrel (col. 1, lines 6-15, 26-48, col. 2, lines 7-29, col. 6, lines 4-8 and 63-68, and col.7, lines 1-16), with interlocking mechanism in the form of lug-and-slot type locking devices, wherein the interlocking mechanism could be formed on one of the core mandrel and the selected one of the adapter sleeve (col. 2, lines 27-47). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have substituted the plurality of mandrels with varying outside diameters of AAPA with a core mandrel and a plurality of adapter sleeves, in light of the teachings of Farfaglia, in order to economically provide mandrels of varying outside diameters. Applicant should note that

the mandrel sleeves of Farfaglia have an inside diameter sized to engage the core mandrel outside diameter across an entire width of the adapter sleeve. Further, even assuming that each of the adapter sleeves taught by Farfaglia does not have an inside diameter sized to engage the core mandrel outside diameter across an entire width of the adapter sleeves, it is noted that such a design is an obvious matter of design choice, as long as the adapter sleeves are properly removably secured around the core mandrel and coaxial alignment between the adapter sleeves and the core mandrel is assured. Regarding the recitation of the sleeves material and their thermal expansion rate as compared to the core mandrel, Applicant should note that it is within the general knowledge of one of ordinary skill in the art to have used steel adapter sleeves. Furthermore it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. See also *Ballas Liquidating Co. v. Allied industries of Kansas, Inc.* (DC Kans) 205 USPQ 331.

For claims 2, 3 and 11-14, Applicant should note that it is within the general knowledge of one of ordinary skill in the art to provide appropriate and effective interlocking mechanism between the core mandrel and the adapter sleeves.

Response to Arguments

3. Applicant's arguments filed May 23, 2008 have been fully considered but they are not persuasive.

4. In response to Applicant's argument that Farfaglia is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the examiner submits that Farfaglia is reasonably pertinent to the particular problem with which Applicant was concerned with, namely quickly modify the outside diameters of forming mandrels without relying on a stock of mandrels having different outside diameters, but using a basic mandrel having a nominal diameter that can be outfitted with adapter sleeves having different outside diameters, this solution that eliminates the time consuming operation of replacement of the mandrels is also a cost saving solution since it is less expensive to produce a core mandrel with adapter sleeves of different outside diameters than to produce a kit of mandrels having different outside diameters.

In response to Applicant's argument that Farfaglia discloses a mandrel structure with a core 41 and a tubular sleeve 47 which is spaced from the core 41 and as such teaches away from the recited feature of the claimed invention, namely, "sleeves each having an inside diameter sized to engage the core mandrel outside diameter across an entire width of the adapter sleeves", the examiner submits that the recitation "sleeves each having an inside diameter sized to engage the core mandrel outside diameter across an entire width of the adapter sleeves" amounts to an obvious matter of design choice wherein no stated problem is solved or unexpected results obtained in designing

the adapter sleeves such that they each have “an inside diameter sized to engage the core mandrel outside diameter across an entire width of the adapter sleeves” versus the design taught by Farfaglia has long as the adapter sleeves are properly removably secured around the core mandrel and coaxial alignment between the adapter sleeves and the core mandrel is assured.

In response to Applicant’s argument that Farfaglia does not teach, suggest or disclose the interlocking mechanism formed on one of the core mandrel and the selected one of the adapter sleeve, the examiner respectfully disagrees. Farfaglia specifically teaches that “Any suitable means can be employed for removably securing the mandrel sleeve (adapter sleeve) around the basic mandrel (col.2, lines 27-29). Further Farfaglia teaches that “Other examples of suitable attaching means include at least one countersunk fastening means such as a bolt in the mandrel sleeve that can be attached to respective threaded portion in the basic mandrel, threaded portions on the interior of one end of the mandrel sleeve which can interlock with corresponding threaded portions on a portion of the basic mandrel mounting sleeve” (col. 2, lines 34-41). The examiner submits that those examples of suitable means correspond to an “interlocking mechanism formed on one of the core mandrel and the selected one of the adapter sleeve”.

In view of the above remarks, the examiner maintains that a *prima facie* case of obviousness has been established in the instant application.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3726

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Essama Omgba/
Primary Examiner, Art Unit 3726

eo
July 31, 2008